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ABSTRACT

The first of the two articles reviews the types of population education currently available, indicating that sex education, education for family living, population awareness, and education for basic value orientations are not mutually exclusive. The objectives and evaluation of such courses are not necessarily identical in different parts of the world, and basic research on cultural and psychological aspects of different societies is a necessary step before population education curricula can be prepared and the target groups identified. The second article contains excerpts from a research paper and discusses methods of promoting patient registration at family planning clinics in the United States, the characteristics of successful facilities, including location and staffing, and measures of clinic efficiency. The eligibility for service and fee policies are discussed and the effect of staff attitude, clinic hours, and waiting time on acceptance of the clinic is mentioned. (AI)

Studies in Family Planning

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Population Education: A Review of the Field

UNTIL recently, family planning programs have been directed primarily toward persons who have already reached reproductive age. An increasing number of educators and population policy planners have emphasized the need to supplement family planning efforts by making population education part of the general education of the child in preparation for adulthood. Four educational approaches have been suggested to introduce the small family concept and promote changes in family limitation behavior in the next generation--sex education, education for family living, population awareness, and basic value orientation. Ozzie G. Simmons, Director of the Institute for Behavioral Sciences, University of Colorado, and Program Advisor in Social Sciences and in Population, Ford Foundation, Santiago, Chile, has prepared the following overview of some of the major issues involved in population education.

Population education—which differs from the traditional family planning approach—could promote changes in family limitation behavior in the next generation. Four educational approaches have been suggested—sex education, education for family living, population awareness, and basic value orientation. Curriculum innovations designed to inculcate the small family concept would have to take into account the cultural and psychological reality of the particular country. Such programs could prove to be a useful and, in the opinion of some experts, a necessary supplement to other means of coping with excessive population growth.

Considerable interest has been expressed recently in exploring approaches to population problems that go beyond family planning.[1] Prominent among the proposals listed is the educational approach to population problems, as this can be implemented through school systems and other appropriate institutions. This paper discusses some principal issues and problems in the professionalization of population education.

Population education is a promising means of diffusing information about population problems more pervasively than through the channels ordinarily available to family planning programs. But it is also important to produce desired changes in attitudes, behavior, and values in the next generation—which is almost here.[2] Reliable information and experience in this field is quite limited. Many questions about relative priorities, emphases, scale, objectives, content, and appropriate target groups need to be ordered into a broad framework of strategy for effective program development in population education. The development of guidelines and criteria for programs in population education could facilitate continuity and at least rough comparability in program development, both in pilot projects and in more ambitious ventures.

Further, of course, good evaluation shou'd be built into education programs so that each group or institution undertaking a new program will not have to rediscover and suffer all the problems and pitfalls of those that have gone before. If this is to repeat the obvious, it is because there is a long history of action programs in which success was taken to be self-evident and because much potentially useful knowledge has been collected but never applied to further program development.

EDUCATIONAL APPROACHES

Three approaches can be readily identified in the literature: sex education, education for family living, and population awareness. They are not necessarily mutually exclusive, although there are only a few attempts to relate these approaches to each other. A fourth has received little attention in the literature—education for basic value orientations which focus on planning for the future.

Sex and Family Life Education

One of the best examples of sex education is the recent work by James L. McCary.[3] The purpose of his book is to "assist the reader toward a better knowl-

[1] Kingsley Davis, "Population Policy: Will Current Programs Succeed?" *Science*, 158: 730-739, November 1967; and Bernard Berelson, "Beyond Family Planning," *Studies in Family Planning*, 38:1-16, February 1969.

[2] The sense of urgency for initiating action in this field is dramatically expressed in the title of a recent paper. See Noël-David Burleson, "The Time Is Now: Population Education," Center for Studies in Education and Development, Harvard Graduate School of Education, May 1969, mimeo. Available from the Carolina Population Center, Chapel Hill, North Carolina.

[3] James L. McCary, *Human Sexuality*, New York: D. Van Nostrand Co., 1967.

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edge of himself and his sexuality, and will encourage him to prepare others for a healthy, well-adjusted sex life." McCary treats such topics as the male and female reproductive systems, menstruation, fertilization, prenatal development, parturition, birth control, techniques and positions in sexual intercourse, sexual attitudes and behavior, and sexual aberrations.

Sex education focuses primarily on the individual, on his biology, health, personal adjustments, and attitudes. A pamphlet published by the National Education Association states:

the primary objectives of sex education programs [in the schools] . . . are to teach young people to understand that the full exercise of their sexual powers is for use in a mature and responsible manner when they have become mature and responsible persons, to live comfortably with the phenomenon of sex, and to integrate sex into their lives creatively and constructively rather than destructively.

The orientation of the Sex Information and Education Council of the United States (SIECUS) embraces family life education as well as sex education, and is concerned with the quality of interpersonal relations, family responsibility, and parent-child and marriage relationships in addition to individual sexuality. The human relations-family life approach is also emphasized by Lester Kirkendall, who has written a number of papers on varying aspects of this approach.[4] Kirkendall, a member of the SIECUS Board of Directors, believes that sex and family life education should be taught from kindergarten through high school at a pace appropriate to the development of the students. A number of school systems in the United States have brought this approach into their curricula. Among the best known are Anaheim and San Diego in California, Washington, D. C., Chicago, Baltimore, and Philadelphia.[5]

But with all the enthusiasm and faith now mobilized for sex education, some of its advocates have their doubts. Luckey says:

the goals of sex education are not altogether clear. Nor is it clear just whose responsibility it is to give sex information to children and adolescents and try to shape the attitudes that determine their moral values and sexual behavior.[6]

A more severe stricture is expressed by Gagnon:

Planning of sex education should then be viewed as a rather secondary force in the development of the sexual life of the child, and while humanitarian values suggest that such planning should be done, the bulk of the evidence suggests that it will play a minor role in setting patterns of sexual life. . . . There may be some long-run value in the teaching of sex education in the schools, since it reduces the role of the parent who may only reproduce his own anxieties in the child. Whatever patterns of sexual life are considered desirable to maintain in a society, or whatever changes men may seek to make in these patterns, it is certain that it will be more difficult to resist or accomplish these goals because of the roots of sexuality in childhood.[7]

Apart from the issue of how effective educational programs in sex and family life can be, there is unquestionably ample justification for these approaches in their own terms. But the assumption of a direct relation between sex and family life education and the practice of family planning certainly needs empirical testing. Sloan Wayland believes it is incorrect to assume that the educational counterpart for young people of family planning education for adults is sex and family life education. He says:

The factors which have led to the initiation of programs in sex education in western countries are essentially unrelated to the factors which have led to serious public concern with population growth in developing countries. . . . Sex education as it has developed in the West is very much oriented to the special problem associated with that social structure, and as such, encompasses many elements which are of limited concern for societies with different structures. . . . For this reason educators or family planning leaders in developing countries should not assume that the potential contribution of educational systems lies in the institution of a sex education program as it has been developed in the West.[8]

Elsewhere Wayland says that since neither sex nor family life educational approaches were developed out of an interest in family planning objectives, they are only marginally or partially appropriate for that field:

Having a full and meaningful understanding of sex and its relationship to all phases of one's life may not lead to any control of family size and one may engage in family planning with only a minimum of concern about one's sexuality.

An unpublished paper by a group at the Carolina Population Center expresses a concept of sex education broad enough to encompass parts of the population awareness approach as well as sex and family life educational approaches to be described below.[9] Arnold and his associates subdivide sex education into four areas: 1) family dynamics (essentially family life education); 2) human reproductive biology and contraception; 3) social interaction (the interpersonal and human relations emphasis); and 4) social science aspects of population (demography, human fertility, and the social determinants of population growth). Unlike Wayland, who questions the relative appropriateness of sex and family life approaches for family planning objectives and proposes a population awareness approach as a viable alternative, the Arnold group believes that educational programs incorporating all three approaches could lead to lower societal fertility, lower venereal disease rates, increase in the use of contraceptives, a rise in positive expectations regarding small family size, and parenthood and child rearing practices pertaining to sexual instruction.

Population Awareness

"Population awareness" is a term used by Burleson to refer to factual knowledge about population dynamics in order to understand the nature and magnitude of the burdens imposed by the population explosion. This knowledge should be acquired by educators and their students to determine what role the schools can or should play in communicating information about population dynamics and birth control. This approach takes as its departure point the concept of Sloan Wayland, as expressed in a paper on the possible goals of an education system as they are relevant to family planning.[10] Elsewhere he lists as possible components of his approach basic instruction in population dynamics, development of basic un-

[4] See, e.g., Lester A. Kirkendall, *Sex Education*, New York: Sex Information and Education Council of the United States, Discussion Guide Number 1, October 1965.

[5] For an inventory of sex and family life education programs in the schools, see Larry S. Rodick, "The Status of Sex, Family Planning and Population Education in Public Education Systems," Center for Population Planning, University of Michigan, August 1968, mimeo.

[6] Eleanore B. Luckey, "Helping Children Grow Up Sexually," *Children*, 14: 130-135, July-August 1967.

[7] John H. Gagnon, "Sexuality and Sexual Learning in the Child," *Psychiatry*, 28: 212-228, August 1965.

[8] Sloan Wayland, "Population Education, Family Planning and the School Curriculum," *The Journal of Family Welfare*, 15 (2), December 1968.

[9] Charles B. Arnold, Roger B. Wells, and Betty E. Cogswell, "Sex Education: A Challenge for Population Planners," Carolina Population Center, University of North Carolina, October 1968, mimeo.

[10] Sloan Wayland, "Family Planning and the School Curriculum," *Family Planning and Population Programs*, edited by Bernard Berelson *et al.*, Chicago: The University of Chicago Press, 1966, pp. 353-362.

derstanding of the process of human reproduction, understanding of health problems associated with childbearing, appreciation of the significance of population characteristics and policies for social and economic development, and familiarity with the population policies and family planning program of one's own country (which can be transmitted without teaching about specific contraceptive methods).[11]

Burleson has conducted research in Cali, Colombia with high school and college students and secondary school teachers to test changes in population knowledge and attitudes as a consequence of the informant's exposure to a short course on population dynamics. He summarizes the progress of the project to date as follows:

> Within the small group of the experiment, we developed greater awareness of the small family as a desirable norm, presented alternatives to the idea that uncontrolled reproduction is necessary to ensure the desired family size, and instructed that methods for the deliberate planning of the family are available in Colombia. For the individual as community member, we have begun to create an understanding of the nature and dynamics of rapid population growth and concomitant effects upon health, work, recreation, education and political institutions. The need or developing population policies was considered, especially in relation to macrocosmic problems with emphasis on the prerequisite of accurate vital statistics. Ultimately, the subjects were exposed to the courses of action available to self, community, and nation.[12]

Although there are differences between pre- and post-testing with regard to family size preference and liberalization of attitudes toward population problems, there is no assurance that attitude changes will necessarily influence actual behavior, but the changes do show, at least, that population awareness can be substantially increased by exposure even to a short course on population dynamics. Burleson himself points out this qualification on his results:

> There is no guarantee that the change will become the subject's family model. It is totally naive to expect that a short course of population dynamics in high school can have a permanent effect. However, if this impact were to be reinforced in other courses throughout the secondary experience, a major restraint on rapid population growth might result.[13]

[11] Sloan Wayland, "Population Education, Family Planning and the School Curriculum," *op. cit.*

[12] David Burleson, "The School and Population," Center for Studies in Education and Development, Harvard Graduate School of Education, June 1968, mimeo. See also his "Population Awareness in Secondary Education: A Colombian Case," undated, mimeo; and "The Time Is Now: Population Education," *op. cit.*

[13] *Ibid.*

Curriculum materials in population awareness are still in early stages of development. Wayland's group at Columbia Teachers College has produced two teachers' guidebooks for use in natural and social science courses, and several preliminary curricula are being developed at the Harvard Center for Studies in Education and Development. According to Wayland, no country yet provides a model, although India is preparing to embark on such a program.

What of Wayland's contention that sex and family life approaches are only marginally appropriate for family planning objectives? Kirkendall believes that these approaches are directly relevant to public policy concerning contraceptives as they relate to population control. Burleson says that we are ill-prepared to teach sex education despite a growing demand for it. He also maintains that no study has been reported that indicates that population awareness is causatively related to attitudes toward population policy and family planning. In the present state of knowledge, it appears that the relative effectiveness and appropriateness for family planning of all three approaches require empirical documentation. It is clear, however, that a program of family planning education in the schools that would include instruction in the use of contraceptives would not be acceptable anywhere at the present time for social, political, and cultural reasons. In any case, the particular mix of these approaches that will be suitable and timely for a given country varies considerably.

Education for Basic Value Orientation

A fourth focus in educational approaches may be termed education for basic value orientations. It should help to make explicit some of the assumptions implicit in the other approaches.

What people will actually do about limiting family size, spacing children, delaying marriage, promoting the entry of women into the labor force, and allocating effort and energy to obtain material, physical, and intellectual well-being for the small family rather than to produce and care for large numbers of children ultimately depends on individual goals as these have been internalized by socialization into the norms and values of one's society. Cultural values and norms associated with sexual and family behavior vary widely, of course, and in many societies are severely proscriptive. Although generalizations here run the danger of being too simple and sweeping, it seems safe to say that status achievement, future-oriented planning and foresight, and the notion that one's fate can be at least partially determined by oneself are all orientations that are much more characteristic of the developed than the developing world. The implementation of these values calls for self-denial, deferral of gratification, and systematic allocation and use of present resources to maximize access to an increasing quality of life in education, housing, medical care, recreation, acquisition of material amenities, etc.

We are confronted everywhere in the developing world with the phenomenon of rising expectations and aspirations. This alone, however, will not be sufficient to insure that people will adopt the kinds of behavior—such as limiting family size—that will be instrumental in realizing their aspirations. As Vincent Whitney has pointed out, acceptance of the desirability of planning births does not guarantee that birth control will be used by individual families:

> Devices to limit the number of children in a family will be used and used effectively only when there is sufficiently strong motivation. It should be emphasized that modern contraceptives are not the cause of falling birth rates. The relevant explanations must be sought in the reasons for the use of any form of birth control. The device, or practice, is nothing more than a means of implementing a decision based on individual values and goals. The demonstrated effectiveness or lack of effectiveness of a contraceptive may, however, strengthen or weaken the determination to continue its use.[14]

And if cultural norms and values have not led to the acquisition of behavior instrumental in planning for the future, family planning may not be used effectively regardless of the degree of its acceptance.

A direct approach to changing basic value orientations is not likely to be effective, and may even mobilize resistance to whatever else the agent of change may be attempting to do. Consequently, educational programs should not be developed which would directly confront, much less attack, a society's basic value orientations. But it should be realized that the successful attainment of the objectives of family planning will ultimately require profound

[14] Vincent Whitney, "Fertility Trends and Children's Allowance Programs," *Children's Allowances and the Economic Welfare of Children: The Report of a Conference*, edited by Eveline M. Burns, sponsored by the Citizens Committee for Children of New York, undated.

changes in traditional values. Whatever approaches or combination of approaches are employed in a given educational program, knowledge will be needed about the relevant aspects of the cultural and psychological reality of the recipient population so that program objectives can take into account their particular values and norms. Basic value orientations are not immutable, but educational efforts to change them, however indirectly, can only progress if the value orientations are known.

THE POPULATION EDUCATION PROGRAM

Objectives and Evaluation

The objectives for any given educational program will have to take into account a variety of factors: the target groups; the readiness of target groups and relevant community leaders, in terms of values, expectations, and attitudes, for certain kinds and levels of education; the extent of coordination or integration of the program with family planning programs; the nature of the school system; and the relationship of the school program to other community institutions and agencies. Whatever may be the objectives, however, they will have to be related to concepts that can be evaluated. And all population education programs must ultimately make some contribution to the inculcation of the small family norm in their target population. The decisive test of the success of this ultimate objective can only be made on a longitudinal basis, since documentation of behavioral changes relating to sexuality cannot take place until the students have usually left school. The problem is further complicated because the data needed for successful evaluation are of a private nature.[15]

There are immediate and intermediate objectives that could be evaluated, by before and after tests. as Burleson has done in Colombia, by increased knowledge and changes in attitudes, perceptions, and expectations. Moreover, controlled experimentation could be conducted to test the effectiveness of different teaching techniques and variations in program approaches and content. In view of the pervasive lack of empirical knowledge in the field of population education, it seems advisable at this time to favor pilot and demonstration projects as experimental first steps in the development of national programs. Burleson's work in Colombia is a good example of the feasible scale of such pilot projects.

Target Groups

There appears to be a consensus that the first priority should be given to schoolteachers presently in service and to students in teachers' colleges and normal schools. Although the most frequent proposal is that population education be introduced across the board from kindergarten through grade 12, it is unlikely that most schools would be able to begin teaching simultaneously across all grade levels. Consequently, priorities must be set for different age and grade level groups. Arnold and his associates suggest that "in societies with low literacy levels (and assumed high educational dropout rates), it would seem most advantageous to begin sex education early in schooling (started by grade 2 or 3) and continue it until grade 9 or 10."[16] In his proposal for population education in India, Wayland suggests that top priority be given to college students, then higher secondary school students, then middle school students, and the lowest priority to primary school students even though they constitute a large majority.

It seems advisable to begin population education as early as possible, particularly in the developing countries where dropout rates are usually high. But it seems highly questionable that exposure to population education in the early school years would have sufficient carryover to withstand the hiatus between the time of dropping out of school and entering into reproductive life. It will be necessary to devise ways of reaching young people who are no longer in school. A program aimed primarily at boys and girls between the ages of 15 and 18, both in and out of school, might have strategic impact because many of them will have already entered into sexual activity; it would have the added advantage of permitting the evaluation of behavioral changes which could not be undertaken with younger people.

Institutional Arrangements

The appropriate institutional locus for launching a population education program may vary from country to country depending on program objectives, target groups selected, political considerations, and the institutional affiliations of those persons with the interest and ability to develop a program. In most instances, it seems likely that the principal locus will be the ministry of education, but even if it is not, it is likely that this ministry's support and collaboration would be necessary for a successful program. Collaboration should also be sought with university schools of education, departments of preventive medicine and health education, ministries of health, and relevant community agencies which serve the young. Wayland has emphasized repeatedly that if the educational program is to maximize population awareness, there should be an organized linkage between the ministry of education (if it is to be the principal locus) and regional and national family planning agencies, which are typically under the administration of ministries of health.

Among programs or proposed programs in Latin America, there are a variety of arrangements. In Costa Rica, the locus for a proposed program is the newly created Center of Studies of Population Development in the University's Faculty of Medicine, but close cooperation with the University's School of Education is planned and linkages will be sought with the Ministry of Education and the powerful teachers' union. In Guatemala, the proposed program would be based at the new Universidad del Valle. In Cali, Colombia, Burleson's work has been done through the Faculty of Education of the Universidad del Valle. Another Colombian pilot project originates in the Colombian Association of Medical Faculties. In Chile, the program is based in the Center for Training, Experimentation and Pedagogic Research of the Ministry of Education.

It appears that flexibility in institutional arrangements, as in all else, is indicated. While each country needs to determine for itself which institutional arrangements are most appropriate, the Arnold group suggests:

> if schools and school systems are to be utilized in the development of sex education programs, an appropriate action planning strategy would need to be developed which would constitute a 'good' test of their utilization in the program. Implicit in this 'test' would be consideration of the alternative societal institutions which could also provide instruction in sex education.[17]

Curriculum Content

As Burleson has indicated, the literature on "education and population" is scant. On the other hand, a great deal of material has been generated for teaching sex and family life education in the schools in

[15] Sloan Wayland, "Family Planning and the School Curriculum," *op. cit.*

[16] Charles B. Arnold *et al.*, *op. cit.*

[17] *Ibid.*

the United States and Europe. The American School Health Association has recently published a detailed suggested program on sex education for kindergarten through grade 12 which makes reference to family planning and birth control as early as the eighth grade.[18] In grades 10 and 11 there is an entire unit on family planning which includes factors to consider in planning a family, spacing of children, and the impact of the population explosion. The material for grade 12 is similar. It remains to be seen whether these suggestions will be adopted by school systems in the development of sex education programs. There is also a comprehensive annotated bibliography of basic reference materials on family life and sex education prepared by the Carolina group.[19] With regard to population awareness, Burleson and his associates have recently prepared an annotated bibliography on population education with major emphasis on population awareness.[20]

According to Wayland, formulation and implementation of a population education program is not easy since serious innovations in education require supporting changes at different points in the education system. The nature of the program to be developed in a particular country will partly depend on the system's characteristics: the dropout pattern, size of school units, the present curriculum's emphasis on contemporary social problems, centralization of administration, and current health education programs. Regardless of the kind of curriculum innovation to be undertaken in a given school system, it is clear that first steps should include a general survey of current course syllabi and textbooks to determine their relevance to population education. The introduction of new instructional materials will necessitate decisions about how and where these materials should be implemented in the curriculum. Burleson presents a series of alternative strategies in the papers already cited. The relative effectiveness of alternative strategies should be tested in experimental projects, from developing special courses limited to certain grades and subjects to comprehensive teaching of population education in every grade by every teacher.

Where should the new content be introduced? The selection of subject areas would of course vary with the characteristics of the particular school system and the grade level, but the areas most frequently mentioned are geography, biology, civics, social studies, national, regional, or world history, and home economics.

It will be necessary to obtain knowledge about the relevant aspects of a people's cultural and psychological reality. This is particularly important if the concepts and terms employed in curriculum innovations are to be meaningful to the recipient population. In teaching about reproductive biology and contraception, it may be relatively easy to adapt for Latin America (and for other parts of the world) program materials developed in other cultures. But, as Sloan Wayland has said, sex education in the West is oriented to the special problems of these societies and encompasses elements which are of limited concern for other societies. Moreover, the social, psychological, and emotional maturation occurring during the transitions from childhood to adolescence to adulthood are subject to a wide variety of cultural definitions and reactions. Cultutes vary considerably in their definitions of adulthood and their criteria are more likely to be set in terms of their particular social and cultural tradition than biological maturity. Teaching about premarital sexual relations, dating, courting, and family responsibility, would have to employ different approaches when the students come from common-law unions where a father may or may not be present and when they come from a middle-class culture.

The wholesale and uncritical transference to Latin America of curricular materials developed in the United States and Europe would result in guidelines that would not be valid. The guidelines used in formulating course content for that program must be drawn, in part, from the local setting. Burleson is aware of this and he calls for research on the adolescent's subculture to provide insight into the psychology of Latin American adolescents.

CONCLUSION

If we are to go beyond family planning in coping with the problem of excessive population growth, population education deserves consideration. Philip Hauser responds positively to Wayland's proposal for population education and says:

> Wayland touches on the basic question 'Under what circumstances may an educational system serve as a means of social change?' In raising this question Wayland, at least implicitly, points to the major omission and unanswered question of the conference and the volume. This is the question whether family planning movements as now conceived and mounted are more efficacious in attaining birth control than alternative programs.[21]

Implicitly, however, Hauser's statement appears to be an either/or proposition. Family planning and population education are not mutually exclusive. Population education may prove to be a useful supplement to family planning efforts; it is hardly an adequate substitute.

[18] Lillian F. Bernhagen *et al.*, "Growth Patterns and Sex Education," *The Journal of School Health*, 37, May 1967.

[19] A. Virginia Aldige and Charles B. Arnold, "Annotated Bibliography of Basic Reference Materials: Family Life and Sex Education," Carolina Population Center, University of North Carolina, January 1967, mimeo.

[20] Noel-David Burleson, "The Time Is Now: Population Education," *op. cit.* For a brief annotation, see *Current Publications in Population/Family Planning*, 3, August 1969.

[21] Philip Hauser, "Family Planning and Population Programs: A Book Review Article," *Demography*, 4 (1): 397-414, 1967.

Alternative Modes of Delivering Family Planning Services

THE FOLLOWING is excerpted from a 104-page research paper that, as stated in the foreword, "breaks the family planning service program into various essential components, each of which can be analyzed relatively independently of the others. . . . Within each section exploring a given component, recommendations will generally be made about preferable methods under various circumstances." Dr. David R. Seidman, director of the operations analysis group of the Office of Budget and Executive Management, District of Columbia, and former Senior Health Analyst in the Office of the Assistant Secretary for Planning and Evaluation of the Department of Health, Education and Welfare, wrote the full paper, Family Planning Service Programs: An Operations Analysis. *It is available from the Office of the Assistant Secretary for Planning and Evaluation, Department of Health, Education and Welfare, Washington, D.C. 20201.*

COMMUNICATIONS WITH THE PATIENT

Probably the most problematic element of a family planning program, and the one which is most subjected to uncertainty and widely varying effectiveness, is the process of communication with the patient, including the promotion and referral mechanisms to encourage registration, and the follow-up methods for persons who have failed to keep appointments.

Planned Parenthood has estimated that the average new family planning clinic should be able to recruit 10 to 15 per cent of the estimated population in need, as estimated by the Dryfoos-Polgar Formula, in the first year of the program, and an additional 5 to 10 per cent each additional year to the fifth year, having achieved a recruitment of 40 per cent or more of the estimated population in need at the end of five years.[1] The rate of increase can be considered a conservative estimate, most relevant if vigorous promotion of the program is not used. The proportion of acceptors is highly dependent upon the type and extent of the enrollment effort and the type of population. The proportion of eligible women in a community who have taken advantage of an established family planning program varies from 10 per cent to 80 per cent.

Mechanisms for Promoting Patient Registration

The range of success just mentioned in attracting patients to a family planning clinic illustrates the widely varying success which can be achieved by differing methods within differing contexts. This range of success is not entirely due to variations in promotional methods; another important factor which must be taken into consideration is the capacity of the clinic to serve the population within the target area. Promotional methods are obviously not going to increase the number of patients enrolled above the level which the clinic can handle. For this reason, it is very important to coordinate the outreach effort with the capacity of the clinic . . . some places have attempted to draw more into their facilities even when they were already badly overcrowded; in many others, a team of physicians and nurses has served only a handful of patients within a session, with little or no outreach effort made to improve this. . . .

There is a wide variety of methods of attracting persons to a family planning clinic: discussion with nurses in maternity wards, or prenatal and postpartum clinics; referrals from organizations, professionals, or friends; outreach personnel; and advertising.

Expected Overall Levels of Clinic Utilization

This sub-section discusses the proportions of the target population which might be expected to take advantage of family planning programs under various general program characteristics; surveys the extent to which various U. S. programs have succeeded in attracting patients; and continues as follows. . . .

It is clear that promotional methods should be evaluated in terms both of the cost of reaching and enrolling a patient and of the proportion of the target population which can be enrolled in that manner. That is, we should rank these methods by their cost per enrollee, determine what proportion of the population can be reached per enrollee, and use the cheapest methods possible to attract the proportion of the population needed to take full advantage of the clinic's capacity. For example, if we seek only to reach 30 per cent of the population in need, we might depend solely upon efforts in postpartum clinics and hospitals. . . . If we wish to reach 50 per cent, we might try an advertisement campaign by radio or mail. If we have the capacity and wish to handle 60 per cent of the population, then we must go to an outreach program. . . . Finally, if we wish to reach the last 25 per cent of the population, we must mount an extensive house-to-house outreach program.

The relevant criterion for evaluating the effectiveness of the recruitment technique is whether it is the cheapest method of reaching the proportion of the type of population we wish to obtain. . . .

. . . A very important contributing factor to an increase in the case loads of the family planning clinics for low income families is the introduction of the new coitus-independent contraceptive methods. Many authors have commented on the positive effect of the availability of these methods on the number of new admissions. . . .

Promotion of Family Planning within the Maternity Ward

One of the most effective means of promoting family planning services appears to be during the maternity process in a large metropolitan hospital, especially in the prenatal clinic and the maternity ward. . . .

The timing and setting are particularly favorable: "The period of pregnancy and the puerperium offer unique opportunities to reach the women of any country in a systematic manner, at a time when contact with persons for whom the woman has respect is at its maximum, and furthermore, when the subject of family planning is clearly most relevant."[2]

Here is an audience of women who have little to do for several days, who have the idea of children and childbearing strongly in mind, who are easily accessible for lectures, demonstrations, group discussions and the like, who will generally be visiting a postpartum clinic with which the family planning service can be connected, and who are quickly and easily reached. . . . Such an ideal setting and attitude on the part of the women generally leads to a very high proportion of women enrolled in the family planning program and a higher proportion of initial appointments kept than in other situations.

Active hospital programs provide at least three opportunities for dissemination of information about the clinic to ob-

[1] Gordon W. Perkin, "Indices of Clinic Function," Planned Parenthood-World Federation.

[2] Howard C. Taylor, "A Family Planning Program Related to Maternity Service," *American Journal of Obstetrics and Gynecology*, July 1966.

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stetric patients: at the prenatal clinic, the delivery ward, and the postpartum clinic. A variety of techniques are used to take advantage of these opportunities. Posters announcing the service are displayed in the prenatal clinic. Classes are held for maternity ward and prenatal clinic mothers several times a week. Films are shown and simple explanatory pamphlets are distributed. Patients are told briefly about the service during the intake interview. In many hospitals, a nurse specially trained in family planning visits the bedside of each mother in the maternity ward explaining the fundamentals of contraception, the choice of methods, and the time and place of the clinic. . . .

Many hospitals distribute simple nonprescription methods to recent postpartum mothers as an interim contraceptive procedure pending the postpartum visit. Even though this may not have much effect physiologically—because of the natural inferility of the postpartum amenorrhea period—many persons consider this to be of great psychological importance in maintaining and reinforcing the woman's intent to practice family planning.

At the postpartum clinic itself, a group lecture, usually given by a nurse assigned to the program, precedes the actual clinic session. This lecture permits group discussion and an opportunity to answer questions and dispel misconceptions, thus assisting patients to select medically approved methods with understanding and confidence. After physical examination and final determination of method by the physician, individualized instruction is given to the patient by the nurse. . . .[3, 4]

Based on averages of existing figures, if we assume that 65 per cent of the women attend a postpartum clinic, and 70 per cent of those women accept family planning, we obtain 46 per cent of maternity cases accepting family planning.

It is possible to make rough estimates of the cost of promoting family planning within the maternity ward. A registered nurse is normally paid around $3.00 an hour. If a nurse spends about 15 minutes with each patient, this would average out to $.75 per patient contacted.

On the basis of the data presented earlier, it can be expected that approximately 45 per cent of the patients contacted will accept family planning. Therefore, the cost of each patient recruited by a registered nurse is $1.63.[5] The cost is low, by comparison with outreach in the community, for two reasons: (1) The near zero travel time required to move from patient to patient. (2) The much higher proportion of women who keep appointments because they have the double incentive of coming for their postpartum visit and their family planning visit.

Promotion by Referrals

As used in this section, referral denotes an enrollee who is motivated to visit a family planning clinic by persons other than outreach personnel. . . . Of the 91,299 new clients which Planned Parenthood Centers served in 1963 in the United States.[6] . . . nearly half (43 per cent) the patients were referred by other patients. This chain reaction or snowball effect should be taken into consideration in any recruitment campaign. Jaffe has stated that many observers attribute the tripling of Planned Parenthood's national patient load between 1960 and 1965 in large part to the "chain reaction" of successful practice among the poor following the introduction of the pill in 1960. Zatuchni has shown that the number of "indirect acceptors"—persons referred by other patients—increases linearly with the number of "direct acceptors"—those referred by outreach or other personnel.[7] His statistics suggest that the proportion may, however, be closer to 20 per cent for family planning services in postpartum clinics. Data from the Muscogee County Department of Public Health also show a 20 per cent figure for patient referrals. Since the Muscogee family planning clinic is located in the public health clinic, there is a high percentage of referrals by the public health nurses elsewhere in the clinic, and a concomitant lower percentage of patient referrals.

Data from the Planned Parenthood Centers served in 1963 indicate that referrals from health agencies, including hospitals, account for another 25 per cent of total referrals. Half the referrals to the Muscogee family planning clinic are from public health nurses. Both these figures indicate the importance of developing good relationships with the health facilities because of the great potential of referrals from them. . . .

Gitta Meier has pointed out the extreme variance in the willingness of hospital maternity clinics to volunteer information about the availability of family planning services elsewhere, or to give such information upon the request of the patient.[8] Some hospitals, including many municipal hospitals, discipline nurses who give such information. In others no discipline is taken, but the nurses or doctors are not encouraged to volunteer information without specific request by the patient. It would appear reasonable to require that family planning information be offered to every maternity and/or postpartum patient in a hospital with a federally funded family planning program; such efforts should be encouraged in other hospitals serving low-income maternity patients.

The Planned Parenthood data show that only 3.5 per cent of the referrals were from welfare agencies. This low percentage is corroborated by other statistics including those of Hatcher and Gross.[9] Jaffe has argued: "Further growth of New York City's program would seem to require a much more active role by the Welfare Department in providing adequate information to relief recipients about their right to secure family planning services (and how to accomplish this), so that the recipient can make a free and informed choice . . ."[10]

When set up, a system of referral from the welfare department is a relatively inexpensive method of referral. The difficulty to date has been the lack of interest within the welfare departments. However, the 1967 amendments to the Social Security Act require in Title IV.A that all AFDC (Aid to Families with Dependent Children) recipients be informed of the availability of family planning services, and that the welfare departments ensure that such services are rendered free of charge to the recipients. Therefore, a much larger number of referrals from welfare departments will occur in the near future. Since many states have many more welfare case workers than public health nurses—e.g., Georgia has twice as many—the potential impact of this legislation can be appreciated.

Other professionals such as private physicians and clergymen have not provided

[3] Gordon W. Perkin, "A Family Planning Unit for Your Hospital?," *Hospital Practice*, May 1967.

[4] Planned Parenthood Federation, "Family Planning Services in Public Health Programs, 4: Family Planning Services in Hospitals."

[5] The reader must be cautioned that the cost figures throughout this paper are out of date by two years or more. They are reasonably accurate relative to one another, however.

[6] Naomi Gray, "Recruiting Low-Income Families for Family Life Education Programs," paper presented at the 1964 National Conference on Social Welfare.

[7] Gerald I. Zatuchni, "International Postpartum Family Planning Program," *American Journal of Obstetrics and Gynecology*, April 1968.

[8] Gitta Meier, "The Role of Hospital Nurses in Family Planning," *American Journal of Nursing*, July 1965.

[9] S. B. Gross, *et al.*, "The Alameda County Health Department's Family Planning Program," *American Journal of Public Health*, November 1966.

[10] Frederick Jaffe, "Family Planning and Public Policy: Is the Culture of Poverty the New Cop-Out?," *Journal of Marriage and the Family*, May 1968.

a very large number of referrals. They are useful primarily as a means of gaining acceptance among opinion makers within the community. They and other persons with status in the community can provide useful contact for developing meetings, door-to-door contacts, and the like. Their use as a source of referrals appears minimal.

Unit Costs for Various Methods of Referral

Elsie Arno has calculated for Muscogee County the initial costs per patient referred by each of these sources, the costs of follow-up per patient remaining for one year, and an estimate of the cost per birth prevented—which take into account total program costs and total effective contraceptive months.[11]

The initial referral costs per new patient were: public health nurse, $9.70; community outreach workers, $25.11; patients, friends, relatives, $5.61; Department of Family and Children's Service, $9.26; and physicians, $6.61. Satisfied patients are the least expensive referral method and outreach workers the most expensive. Public health nurses, unlike the outreach workers, did not make special visits for family planning; family planning was only one of a variety of subjects which the nurses discussed with the patients. Since the nurses generally met the patients in a clinic setting, they were able to see a large number of patients in a short period.

Interestingly, the drop-out rate over a year was roughly 30 per cent to 40 per cent for each method. Thus there are no strong indications of differences in motivational level between the various referral methods. Unit follow-up costs for patients reached initially by outreach are very high ($113), but this is because follow-up costs for procedures for these patients were by outreach, unlike follow-up procedures for the patients reached initially by other referral methods. The follow-up costs for these other patients was below $4 per patient.

Promotion by Outreach Personnel

Outreach personnel, that is, workers who go out to visit clients in their homes and discuss the family planning clinic with them, are probably the most effective means of attracting a high proportion of the target population to the clinic. They are also the most expensive means of reaching people.

Table I presents the results of the outreach workers' efforts (columns 1–3) and the average and marginal costs of each type of effort (columns 4–6).

Column 1 provides the percentage of the total target population to whom a given effort was addressed. For ease of computation, the target population is defined as those to whom the first outreach effort was addressed. Column 2 provides the percentage of the total target population that came in as a result of each specific effort; it is not the percentage out of those to whom the effort was addressed. Column 3 cumulates these percentages. Column 4 provides the cost of addressing one person by a particular type of effort, that is, one letter or one home visit. Column 5 provides the average cost of all efforts for each patient coming into the clinic. It is cumulative, in that it averages all efforts made up to that point; e.g., the value for Row 2 includes the initial home visit and letter efforts. Column 6 provides the cost of attracting an additional patient into the clinic by a given type of effort. For example, the marginal cost of a letter signifies the additional cost of attracting by letter a woman who failed to keep an appointment she had made.

Both the average and marginal costs of initial and follow-up visits are in the range of $25 to $32.

It appears that recruitment by outreach is by far the most expensive method of recruitment, costing in the range of $25 per patient recruited, compared with perhaps $1.60 for recruitment in the maternity ward and between $3 and $10 for referrals by various professionals or patients.

Outreach has two possible advantages over other methods: 1. It appears to bring in a higher proportion of the total population in need. . . . 2. It brings in a population with different characteristics. Supporters of outreach state that a younger, lower-parity population is reached. . . .

If a decision is made to use outreach, it should be kept in mind that experts connected with such efforts emphasize the high importance of careful, thorough training of the outreach workers. Inadequately trained volunteers or indiginous workers can wreak havoc in a community when dealing with such a sensitive subject as family planning.

Promotion by Mass Communication Methods

This final section on methods of promoting family planning is on the use of mass communication, including posters, radio and television announcements, newspaper advertisements, and mailings. Regrettably, few studies of the effectiveness of these methods have been made. Two which have been reported in the literature will be discussed here. The first was carried out in Taiwan by Berelson and Freedman.[12] The second study was carried out in Chicago by Bogue.[13] We shall concentrate here on the conclusions of the study which are most relevant to the issues of this section.

In Taiwan the home visits appear to attract about 2½ times as many women as posters or mailings alone. The direct mail had no effect above that of the posters and discussion with community leaders. Efforts seemed to be more effective in high density areas than in medium or low density areas, especially in the home visits.

[11] Elsie Arno, *A Cost—Benefit and Cost—Effectiveness Analysis of the Muscogee County Family Planning Clinic*, Master's Thesis, Auburn University, Auburn, Alabama, March 1969.

[12] Bernard Berelson and Ronald Freedman, "A Study in Fertility Control," *Scientific American*, May 1964; and John A. Ross, "Cost Analysis of the Taichung Experiment," *Studies in Family Planning*, 10: 6-15, February 1966.

[13] Donald J. Bogue, "The Chicago Fertility Control Studies," *Studies in Family Planning*, 15: 1-8, October 1966.

TABLE I. *Results of Promotion of Family Planning by Outreach Personnel*

Type of effort	Per cent of total population addressed	Per cent of total population coming in	Cumulative per cent coming in	Unit cost of effort	Average cost per patient coming in	Marginal cost per patient coming in
Initial home visit	100.0	11.63	11.63	$3.71	$31.90	$31.90
Letter	16.05	1.72	12.35	$ .50	$30.05	$ 4.67
Follow-up home visit	14.33	2.21	14.56	$3.90	$29.33	$25.32

Source: Data supplied by Dr. Frank I. Moore from the Louisiana Family Planning Program.

The treatment of posters and meetings with community leaders has the smallest unit cost of bringing patients into a clinic ($1.00); the home visit treatment is the most expensive by a factor of 5 to 8 ($6.45 to $8.17). . . . There is a hierarchy of types of promotional efforts, which achieve a higher and higher proportion of acceptors at greater and greater costs per acceptor. The choice of method, therefore, depends upon the number of patients which the clinic wishes to serve and can handle.

Considerable caution must be taken in translating these cost figures to U. S. circumstances. Taiwan wage scales were one-tenth that of comparable workers in America, and labor costs comprised 50 per cent of the total project costs. Materials comprised another 25 per cent of the costs. In the U. S. less cost comparison data are available. We might estimate that total program costs in the U. S. would be seven or eight times as great as in Taiwan. This yields a figure for outreach around $48, and a cost for mailing of $13.

The Chicago experiment focused on the West Side of Chicago. . . . A random sample of the recipients of family planning literature were contacted by an outreach worker and encouraged to come into the clinic. The average cost per patient for this promotional method was approximately $48, about 3½ times the cost for the mass mailings.

Follow-up Procedures

Once a woman has become a patient in a family planning clinic, the major role of the formal communication effort is to encourage her to remain enrolled in the program as an effective user of a good contraceptive method. This section explores the extent to which patients tend to drop out of a program, the factors which influence these dropout rates, and the cost and effectiveness of various follow-up procedures. . . .

The question arises whether it is more efficient to follow up a patient who has dropped out, or instead to spend that time and energy in recruiting a new patient. Data provided later in this section suggest that it is cheaper to try simple methods to re-enroll a dropout than it is to recruit a new patient. We must be careful here, however, to differentiate between the dropout who ceases to use contraception and the woman who merely ceases to be a patient in the clinic but continues to obtain her supplies elsewhere.

Continuation Rates in Selected Projects

This sub-section summarizes various studies that have shown that the dropout rate for effective methods like the oral contraceptive and the IUD are significantly lower than dropout rates for less effective or harder to use methods such as the diaphragm and foam, and concludes as follows.

Differences in the operation of the clinics are, perhaps, more important than the differentials in patient population characteristics. The major consideration within this realm is the difference in follow-up methods, that is, the amount and type of follow-up in terms of the post cards, telephone calls, and visits made to patients who fail to reappear at the clinic. . . . It is important to note that all the clinics with poor continuation rates had no follow-up, although two clinics with good continuation rates had no follow-up.

Reasons for Dropping Out

The reasons for not coming back to a clinic will influence the extent to which follow-up might be expected to work. If the causes make the patients unavailable for service—e.g., moved, planned pregnancy, or birth control no longer needed—then follow-up can have no result. If the causes are ones of motivation, attitude, or accessibility, follow-up can have a significant impact. . . .

One study found that of the 48 per cent discontinuing pills after a two year period, 15 per cent of these had moved, 27 per cent wanted a baby or no longer needed contraception, and the remaining 58 per cent still needed contraception.[14]

Many of the reasons for dropping out . . . suggest that there was insufficient instruction and motivation of the women during their first visit, so that they were not prepared for the side effects and difficulties of the pills and the IUDs and were not sufficiently motivated to work with them.

The Effectiveness of Alternative Follow-up Methods

In this sub-section we will consider the feasibility of using home visit follow-up personnel whose sole responsibility is to the family planning clinic.

Dr. Frank I. Moore, from the Louisiana Family Planning Program directed by Dr. Joseph Beasley, has supplied this analysis with estimates of the cost of their follow-up procedures. Their procedures are as follows: When a patient has missed an initial or revisit appointment, she is first written or phoned to have a second appointment made. If this appointment is missed, then an auxiliary worker from the family planning clinic makes a home visit to offer a third appointment. If the third appointment is missed, the patient is closed from the records.

Examination of the implied costs for various possible combinations of the procedures, e.g., using a single phone call, only shows that the average follow-up cost is not high for any combination, partly because 66 per cent of the women come in without any follow-up being necessary. Even the marginal cost for a home visit is only $7.24, compared with the $30 figure for outreach. This difference is caused primarily by the differences between follow-up and outreach in the proportion of patients contacted and the proportion available.

A similar follow-up effort was made on a nationwide basis in 1961 by Planned Parenthood, using 21,917 patients who were due for an annual check-up.[15] There were four steps in the procedure of bringing the women in for the check-up—three successive letters and a final home visit. The results showed the following (figures in parentheses indicate corresponding results from Moore's study): rate of return for home visits, 4 per cent (54 per cent); marginal cost of home visit, $94 ($7.24); total response rate, 47 per cent (91 per cent); ratio of cost of home visit to cost of letters, 30:1 (6:1). The much lower payoff of home visits in the PP-WP study versus Moore's is, in part, due to two factors: the three letter sequence of the PP-WP study, by comparison with only one letter in Moore's; and the interval of one year since the last visit in the PP-WP study by comparison with a one to three month interval in Moore's.

To maintain the participation of the clients . . . a systematic reminder and follow-up system should be devised, using post cards and phone calls in a sequence of two to four staged reminders.

One example of a carefully designed follow-up mechanism is that used by the Georgia State Department of Family and Children Services.[16] When a patient makes an appointment, he fills out an appointment notice; one copy goes to the patient and another to the clinic file. A week before the patient's appointment, a reminder card is mailed to her. The clinic appointment card is fed into a computer which prints out a set of useful tables, and

[14] A. P. Satterthwaite, "A Comparative Study of Low Dosage Oral Contraceptives," *Applied Therapeutics*, May 1964.

[15] Brooks S. Creedy and Steven Polgar, "Returning for Yearly Check-ups—A Study of 22,000 Family Planning Clients," Planned Parenthood-World Population, November 1963.

[16] Ronald W. O'Connor, "Planning and Implementing a Large-Scale Family Planning Program in Georgia," paper presented at the 1968 Epidemiological Information Survey Conference.

lists of patients who (1) need to be seen during any given month; (2) missed their appointment during the month; and (3) dropped out of the clinic. Through such listings, patients can be systematically called to make another appointment either because they missed one or because sufficient time has elapsed since the last one.

Perhaps the most effective follow-up system for a large clinic would combine the automatic aspects of the Georgia mechanism with a series of persuasive letters similar to those of Planned Parenthood.

There is some question as to what extent home visits should be used at all for follow-up. The $7.24 cost estimated from Moore's figures is considerably less than his statistics indicate it costs to attract a new patient by outreach. It is nonetheless as high as or higher than the cost of attracting new patients by most referral methods, by mass communication, or by maternity ward promotion. Furthermore, the Planned Parenthood data suggest that a series of postcards or phone calls will bring in most of the women who might come into the clinic, leaving very few available women to respond to the home visit. Thus the marginal cost of a response to a home visit would be considerably higher than $7.24.

It appears that the best follow-up strategy depends both upon the ease of attracting new patients and upon the marginal cost of the home visit follow-up. If the attraction of new patients to the clinic depends primarily upon outreach, then follow-up by home visits appears cheaper. If, however, the clinic can meet its capacity by the less expensive promotional methods, then the expenditure of funds for home follow-up visits must be questioned.

The fact that 63 per cent of the patients followed up by health auxiliaries in New Orleans accepted appointments and that only 42 per cent of these kept the appointment suggests that the main problem is not that these women have changed their minds about contraception, but simply that they find it difficult to keep appointments or are insufficiently motivated to do so. For them a fairly continuous effort is needed to keep them coming in.

Two conclusions may be drawn from the preceding analysis of follow-up cost and effectiveness. First, every family planning center should have a systematic follow-up mechanism which reminds patients of appointments and delivers to them a series of letters or phone calls if they fail to appear. Second, each center should have sufficient flexibility in its budgeting and personnel to allow for the use of home follow-up visits when the clinic finds it can reach its capacity only through outreach efforts by health auxiliaries. If this latter situation is not the case, it should probably be sparing in its use of home visits for follow-up.

The section entitled "Services Offered in the Clinic," dealing with contraceptive and other services and the effectiveness of different contraceptive methods, has been omitted here.

CHARACTERISTICS OF FACILITIES AND PERSONNEL

Facility Location

Proximity to Other Health Services

There are several aspects to the location of a family planning clinic. The first concerns whether it is situated in or close to another health services clinic and, if so, of what type. Clinics having such proximity have several important advantages over completely separate, free-standing clinics: better attraction of patients; greater efficiency in personnel utilization; and better access to medical information on patients.

. . . Locating a family planning clinic in a postpartum clinic significantly increases the attractiveness of each and decreases the promotional cost. Return rates to postpartum clinics typically double to as high as 75 per cent following the introduction of family planning services, and often 30 per cent or more of these postpartum patients will accept family planning.

Similarly, a public health clinic offers unusual opportunities for public health nurses to refer patients to the family planning service. (In this discussion, the term "public health clinic" will be generally used to refer to a general-purpose health service clinic run by a city health department separate from a municipal hospital.). . . .

Of course, both these promotional efforts could be carried out for a family planning service not located at the same site as other health services, but experience has shown that the farther removed such services are from each other, the more significant the attrition rate in family planning referrals. Eliot and Meier have shown that more than half the postpartum referrals can be lost if family planning services are located outside the hospital containing the postpartum clinic.[17]

The combined health services setting has the additional advantage over the free-standing family planning clinic that some women are embarrassed at going to a free-standing family planning clinic; they feel easier going into a general health service facility.

Concerning the efficient utilization of staff, Planned Parenthood asserts, "The great advantage of family planning clinics in hospitals with obstetric departments is that a considerable level of service can be provided with only minor changes in departmental organization, additions to staff and additional equipment."[18] Hatcher concurs and extends this to other public health facilities:

> Family planning services can often be added with a minimum of cost to the ongoing services of a health department. Nurses, clerical help, and the clinic facilities themselves can often be adapted quite easily for the provision of contraceptive care. If contraceptive care focuses upon an already existing health department postpartum clinic, as has been done recently in several mass family planning programs in municipal hospitals, then the amount of shift of personnel is minimized.[19]

A third advantage of associating family planning services with other health services is stated by Lippes and Randall. They had reference to a setting in a municipal hospital, but some of these advantages will also obtain in a public health clinic: "From the standpoint of patient care an invaluable consideration is the availability of the patient's hospital OPD [Outpatient Department] record and the inpatient's service summaries . . ."[20]

Given the desirability of locating family planning services within existing health facilities, the issue arises whether these services should be in a separate family planning clinic or as part of another, existing health clinic. The question arises most often with respect to placing a family planning clinic within the postpartum clinic. There are valid arguments on both sides of this issue. Separation allows for focused concerns on the success of a family planning program. As Perkin states, "Occasionally, when family planning is added to a maternal care program without a specific assignment of staff, clinic space, or schedule, it tends to remain a nominal rather than a fully utilized health service. Doctors neglect to suggest it, and only

[17] Johan W. Eliot and Gitta Meier, "Estimation of Family Planning Assistance Available to Low-Income Patients through Hospital Obstetric and Gynecology Services," *American Journal of Public Health*, November 1966.

[18] Planned Parenthood Federation, *op. cit.*

[19] Robert A. Hatcher and Mary John Tiller, "Rapid Acceleration of a Public Health Department Family Planning Program: Muscogee County, Georgia."

[20] Jack Lippes and Clyde L. Randall, "Participation of Area Hospitals in Family Planning," *American Journal of Public Health*, January 1966 Supplement.

patients who press for it can obtain contraceptive guidance easily."[21]

Organizational separateness can present problems as well, however. Patients may frequently have to make duplicate appointments and undergo repetitive examinations. Separation also increases the chances of losing patients.

Since the advantages of separateness are focused primarily on duplication of efforts and inconvenience of separate sites, it appears that either separate or combined clinics may be effective if certain conditions are met: There should be separate assignment of responsibility for family planning services to a family planning director, with full-time assignments of some other personnel, and a separate budget and accountability for family planning services. If there is a separate family planning clinic, it should be situated extremely close to the postpartum clinic—preferably on the same floor of the hospital building; and unnecessary duplication of forms, medical examinations, and appointments should be eliminated.

Beside the postpartum clinic and public health clinics there is one other important type of health service organization which must be considered as a desirable site for family planning services—the neighborhood health center. These appear to be excellent because of their accessibility and acceptance among the client population. When family planning services are located in a neighborhood health center, however, steps should be taken to assure that there is separate accountability and budgeting for the services, just as in the postpartum and public health facilities. Experience to date suggests that when the family planning services are not made an explicit, recognizable, and accountable part of the neighborhood health centers, they tend to be neglected.

One particular type of free-standing family planning clinic appears justifiable only under very special circumstances—the mobile clinics. Their unit costs appear to be significantly greater than other settings, in part because of the difficulty in using the personnel efficiently and the difficulty in attracting sufficient numbers of women to keep the personnel occupied.[22, 23] The mobile units appear to be advisable only in very low density, generally rural, settings.

It appears that within the hospital setting the family planning service is better associated with the postpartum clinic than with the outpatient department, for two reasons. First, the clientele in need of service is concentrated most heavily in the maternity ward and postpartum population of the hospitals. . . . Second, the skills and functions of the staff of the postpartum clinic are closest to those needed for family planning services; an OB-GYN (obstetrics/gynecology) orientation is paramount in each and the physical exams are essentially the same.

Manpower and Clinic Costs

In this section, we will consider primarily the manpower needs for the clinic function itself, that is, the reception and servicing of the medical and consultative needs of patients coming into the clinic.

The greatest diversity of skills occurs in the clinic setting, creating the greatest opportunity to try new mixes of skills. Unfortunately, it appears that very little explicit experimentation with varying uses of non-professionals or lower professionals has been made to date in family planning clinics. The data available are therefore in no way controlled, so that it is difficult to draw firm conclusions about the relative effectiveness of various mixes of personnel. . . .

In the proposal for a research program recently funded by Children's Bureau, Charles Dean, of Planned Parenthood, commented:

> Preliminary investigations have revealed that there is a great deal of variation in the operations of clinics. Nurses perform functions in some clinics that are performed by sub-professionals in others and by doctors in others. The number of nurses per clinician varies considerably. The amount of time that the clinician spends with the patients seems to vary with the number of health aides, the service offered . . . and the quality of the group lecture.
>
> The fact that registered nurses were performing services that could have readily been performed by clerks (i.e., addressing postcards for follow-up) was known and deplored by the clinic directors but was tolerated.

According to Dr. Robert Hatcher, the Muscogee County Health Department has made extensive use of aides in four clinical areas of its family planning program as well as for recruitment and follow-up purposes. Their aides are used as hostesses, educators, chauffeurs, and nurses' aides.

Hatcher believes that with the proper training, the function of the aides could be extended to include uncomplicated tasks such as Papanicolaou smears and perhaps even insertion of devices.

Clinic Staffing Patterns and Personnel Costs

In this section data are presented on clinic staffing patterns and personnel cost estimates by six different investigators. The data indicate that no firm conclusions on the efficiency of using nurses and paraprofessionals versus physicians can be made until careful cost studies are initiated.

Measures of Clinic Efficiency

. . . One major difficulty in determining the production function of family planning services is that the types of visits vary from ones requiring merely the refilling of prescriptions for oral contraceptives, to visits by new patients requiring an entire medical examination. To address this problem, Dr. Gordon Perkin has developed an interesting set of measures of the output of the clinic in terms of weighted patient visits.[24] . . . The patient visits are weighted by estimating the number and type of staff normally involved in each type of visit as well as the approximate clinic time required to provide the service. Dr. Perkin has also developed measures of personnel input of the clinic in terms of weighted staff time. The staff time is weighted according to the approximate hourly wages for the various types of clinic personnel. The application of the same weights in all clinics is of greater importance than is high precision in the weights themselves. The weights Perkin proposed for various patient visits and the staff times are given below. Total weighted patients' scores per clinic session are obtained by multiplying the number of patients of each type times their weight, and summing. Similarly, staff scores are computed by multiplying total number of staff hours of each type times their weight, and summing. A patient index is then obtained by dividing the total weighted patient score by the total number of patients in a clinic session, and a staff index, by dividing the total weighted staff score by the total hours worked by all staff per session.

A rough comparative measure of clinic efficiency can now be derived from the patient and staff indexes:

$$\text{Clinic efficiency} = \frac{\text{Total weighted patient score}}{\text{Total weighted staff score}} \times 100$$

[21] Gordon W. Perkin, "A Family Planning Unit for Your Hospital?," *Hospital Practice*, May 1967.

[22] Steven Polgar, "The PPFA Mobile Service Project in New York City," *Studies in Family Planning*, 15: 9-15, October 1966.

[23] Dorothy M. Brown, "Cleveland Planned Parenthood Cost Analysis, 1966," unpublished report.

[24] Gordon W. Perkin, "Preliminary Explanation of a Patient/Staff Index as a Comparative Measure of Family Planning Clinic Performance," unpublished draft, Planned Parenthood Federation, June 1967.

This index is the measure that we would try to minimize in our experiments on staffing mixes. Of course there must be some constraints on this; some clinics with very high indexes may be providing inadequate patient care, rushing too many patients through during a session. Therefore this index must be combined with other output measures such as continuation rates.

Eligibility Requirements and Fee Schedule

A major factor which influences both the expense of a program and the ability to attract clients is the eligibility requirements for clients and the payments required of them. . . .

There appear to be three main issues concerning eligibility, with questions of fee schedules being closely tied to the first two issues: income range; geographic criteria; and extent of participation by parous and nulliparous women.

The state of existing fee requirements is well summarized by the following Planned Parenthood statement:[25]

> There is no uniformity among public agencies on fee policy; some charge nominal fees which do not reflect the total cost of the service, some charge fees only to cover the cost of supplies, and others charge no fees at all. Planned Parenthood centers generally must charge fees on a sliding scale, while projects funded by the Office of Economic Opportunity prefer that the services be offered free to poor patients.
>
> Many Planned Parenthood and public agency workers have the impression that even fees which professionals regard as nominal can be a serious deterrent to utilization of services by low-income families and may be responsible in some measure for failure of patients to return for clinic checkups and supplies. Others feel that a minimal fee may be helpful in sustaining the interest of patients. However, it is perhaps not accidental that the most extensive programs thus far—e.g., New York City, Washington, D.C. and Mecklenburg County—offer the service free of all charges and continue to provide supplies for as long as desired.

. . . The proposed guidelines for family planning project grants in the National Center for Family Planning Services presently state that services should be available without requirement for legal residence and upon referral from any source, including self referral.[26]

Generally local health departments make no specific income requirements other than simply defining as eligible "all persons who are unable to obtain care from a private physician, hospital or clinic . . ." Because of the great benefits and comparatively low cost of family planning services, it appears undesirable to be highly restrictive in the definition of the eligible population.

Geographic criteria are less effective in differentiating between those persons who can afford to pay for services and those who cannot. Census statistics have shown that a large number of non-poor live in defined poverty areas. Therefore, for federally sponsored programs, geographic eligibility criteria do not appear desirable.

The other major eligibility issue concerns minor unmarried women, especially nulliparous, minor, unmarried women. Parous women who are minors are generally accepted with parental consent. In many localities they are accepted without parental consent. The District of Columbia Health Department, for example, accepts women, married or unmarried, regardless of age, who have been pregnant and are patients at the time in one of the health department's clinics.

The most difficult and sensitive question concerns the eligibility of unwed minors who have had no children. There appear to be few family planning centers which offer services to such women, especially without parental consent. Our analysis strongly indicates that the largest benefits of family planning are accrued by unwed women who avoid the first pregnancy. The first pregnancy is by far the most disastrous to such a girl; it usually cuts off her education, often reduces her marriage or job possibilities, and increases the chances of her being doomed to a welfare existence if she comes from a family in poverty. Therefore, restricting eligibility to mothers excludes the group of women whose benefits from family planning probably exceed those of any other group.

There is understandably a difficult legal and political question in allowing eligibility to these women, especially without parental consent. Nevertheless, considering the potential benefits, it appears that the effort is worthwhile. It is suggested here that unwed minors, regardless of parity, be made eligible upon written parental consent or upon the recommendation of medical and related professional personnel.

Other Influences on Client Acceptance

There are several other factors which can significantly influence client attendance at a clinic.

Staff Attitude

. . . Darity stated that in one study almost 90 per cent of the patients interviewed cited "kind treatment" as the characteristic they most liked about the health department family planning program.[27]

It is not clear what steps can be taken to bring about the best relationship between staff and patients. . . . These might include: (1) staff orientation sessions and discussion groups; (2) screening methods of potential staff members to select for this quality along with others; and (3) greater patient participation in the administration of the clinic, preferably in the form of a neighborhood advisory committee.

Clinic Hours

. . . The most crucial difficulty . . . probably arises with women who work during the daytime and can only attend during evening or weekend sessions. . . .

Waiting Time

. . . This excess wait could have two different causes. It might be caused by the overloading of facilities, the result of the inability to hire sufficient staff for sufficient numbers of clinic sessions. It would then be primarily a problem of money, which could be eventually solved by additional appropriations from Congress.

It might instead, however, be caused by a method of operating which leads to large queues because the physicians wish to avoid any idle time on their own part. . . .

[25] Planned Parenthood Federation, "Family Planning Services in Public Health Programs, No. 2: Some Considerations in Program Plan[illegible]."

[26] *Grants for Family Planning Projects: Policies and Procedures*, National Center for Family Planning Services, Department of Health, Education, and Welfare.

[27] W. Darity, *Public Family Planning Clinics*, Reference and Research Program, New York, 1966.

THE POPULATION COUNCIL
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